THE CLAIMS

What is claimed is:

1. An anti-tumor agent derived from reptile serum. comprising at least one serum protein from normal reptile serum.

2. The anti-tumor agent of claim 1 wherein the serum protein is obtained from normal alligator serum.

3. The anti-tumor agent of claim 1 wherein at least one serum protein has a molecular weight in excess of 100,000 Daltons in its native form.

4. The anti-tumor agent of claim 3 wherein at least one serum protein has a molecular weight of about 150,000 Daltons in its native form.

5. The anti-tumor agent of claim 1 wherein the anti-tumor agent comprises at least two proteins.

6. The anti-tumor agent of claim 5 wherein the anti-tumor agent comprises a first protein having a molecular weight in excess of 100.000 Daltons and a second protein having a molecular weight in excess of 200.000 Daltons.

7. The anti-tumor agent of claim 5 wherein the anti-tumor agent comprises a first protein having a molecular weight of about 150,000 Daltons and a second protein having a molecular weight of about 700,000 Daltons.

8. The anti-tumor agent of claim 4 wherein the protein is an immunoglobulin.

9. The anti-tumor agent of claim 1 wherein the protein is in essentially isolated form.

10. An anti-tumor agent derived from reptile serum comprising a subunit of an anti-tumor protein derived from reptile serum.

11. An anti-tumor agent derived from reptile serum comprising a fragment of an anti tumor protein derived from reptile serum which retains the activity of the intact protein.

12. An anti-tumor agent derived from reptile serum comprising an active fragment of an immunoglobulin molecule according to claim 8.

13. An anti-tumor agent derived from reptile serum comprising an active peptide derived from an anti-tumor protein.

14. A pharmaceutical composition comprising as an active ingredient the anti-tumor agent of claim 1.

15. A pharmaceutical composition comprising as an active ingredient the anti-tumor agent of claim 11.

16. A pharmaceutical composition comprising as an active ingredient the anti-tumor agent of claim 12.

17. A pharmaceutical composition comprising as an active ingredient the anti-tumor agent of claim 13.

18. A diagnostic reagent comprising as an active ingredient the anti-tumor agent of claim 1.

19. A diagnostic reagent comprising as an active ingredient the anti-tumor agent of claim 11.

20. A diagnostic reagent comprising as an active ingredient the anti-tumor agent of claim 12.

21. A diagnostic reagent comprising as an active ingredient the anti-tumor agent of claim 13.

22. A process for preparing an anti-tumor agent from reptile serum comprising the steps of : a) fractionating reptile serum by adding an ammonium sulfate salt in an amount of about 45% of the amount necessary to form a saturated solution: b) centrifuging the serum to recover the precipitated proteins: c) redissolving the precipitate and desalting the recovered proteins: d) gel filtering the desalted proteins: and e) collecting an active fraction.

23. The process according to claim 22 wherein the active fraction comprises a protein having a molecular weight of approximately 150.000 Daltons.

24. The process according to claim 23 further comprising isolating the protein in essentially purified form.

25. The process according to claim 24 wherein the protein is affinity purified using a specific antibody.

26. An anti-tumor agent from reptile serum comprising at least one protein from the serum of normal alligators obtained by a process comprising the steps of : a) fractionating the serum by the addition of ammonium sulfate salt in an amount of about 45% of the amount necessary to form a saturated solution; b) centrifuging the serum to recover the precipitated proteins; c) redissolving the precipitate and desalting the recovered proteins: d) gel filtering the desalted proteins; and e) collecting at least one active fraction.

27. The anti-tumor agent of claim 26 wherein the anti-tumor agent comprises at least two serum proteins.

28. A method of treating or preventing cancer which comprises administering to a mammal in need thereof a pharmaceutical composition comprising as an active ingredient a therapeutically effective amount of an anti-tumor agent derived from reptile serum and comprising at least one serum protein found in normal reptiles.

29. A method of treating or preventing cancer comprising administering to a mammal in need thereof a pharmaceutical composition comprising as an active ingredient a therapeutically effective amount of an anti-tumor agent derived from the serum of reptiles comprising at least one active fragment of a serum protein found in normal reptiles.

30. A method of treating cancer comprising administering to a mammal in need thereof a pharmaceutical composition comprising as an active ingredient a therapeutically effective amount of an anti-tumor agent derived from reptile serum and comprising at least one active fragment of a serum protein found in normal reptiles and being covalently coupled to an anticancer drug.

31. A method of diagnosing or imaging cancer comprising utilizing a diagnostic reagent comprising as an active ingredient an anti-tumor agent derived from reptile serum and comprising at least one serum protein found in normal reptiles.

32. A method of diagnosing or imaging cancer comprising utilizing a diagnostic reagent comprising as an active ingredient an anti-tumor agent derived from reptile serum and comprising at least one active fragment of a serum protein found in normal reptiles.

33. A method of diagnosing or imaging cancer comprising administering to a mammal a diagnostic reagent comprising as an active ingredient an anti-tumor agent derived from reptile serum comprising at least one serum protein found in normal reptiles.

34. A method of diagnosing or imaging cancer comprising administering to a mammal a diagnostic reagent comprising as an active ingredient an anti-tumor agent derived from reptile serum and comprising at least one active fragment of a serum protein found in normal reptiles.

35. An antibody preparation comprising at least one antibody recognizing an anti-tumor agent derived from reptile serum.